

PROCEEDINGS  
OF THE  
BIOLOGICAL SOCIETY OF WASHINGTON

*FLORIDOBOLUS*, A NEW MILLIPED GENUS  
(SPIROBOLIDAE)

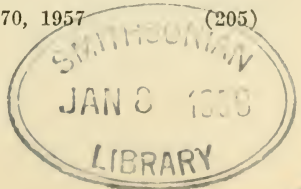
BY NELL B. CAUSEY  
*Fayetteville, Arkansas*

A small but notable collection of millipeds from the vicinity of the Archbold Biological Station, Lake Placid, Florida, contains four species representing three genera of the family Spirobolidae. Most of the specimens were collected during June, July, and August, 1957, by Dr. L. R. Penner.

*Narceus ramstadi* (Chamberlin 1943) is represented by numerous specimens; one collection was made at Highlands Hummock State Park. Several large greenish females that have a width of up to 12.5 mm have been tentatively identified as *Narceus keysi* (Loomis 1944). There is one molting specimen of *Chicobolus spinigerus* (Wood 1864), a species identified from the area earlier (Chamberlin 1951). *Floridobolus penneri*, a new genus and species, which is represented by two specimens, is named for Dr. Penner, who called my attention to the undescribed genus. It is the eleventh species of the family Spirobolidae reported from Florida.

*Floridobolus* is the fourth genus of the Spirobolidae reported from the United States east of the Rocky Mountains. Species of *Narceus* are found from New York south into Florida and westward into Nebraska, Kansas, Oklahoma, and Texas; species of *Chicobolus* are known from South Carolina, Georgia, Florida, and the Florida Keys; and one species of the Pacific Coast genus *Californibolus* has been collected in Kansas, Nebraska, and Iowa (Causey, 1955). In the following key to these four genera the first sentence in each couplet applies to somatic characters of either sex and the second applies to gonopods and coxal processes of adult males:

- 1. Ventral margin of mandibular checks bears an acute triangular lobe ..... *Narceus* Rafinesque 1820  
    Ventral margin of mandibular checks either rounded or broadly angular, without an acute triangular lobe ..... 2
- 2. Anal valves compressed and raised along the medial body line. Telopodite of anterior gonopods evenly subuncate at end; telopodite of posterior gonopods with a free inner piece; coxal lobe of seventh legs largest ..... *Chicobolus* Chamberlin 1947  
    Anal valves not compressed along medial body line. Telopodite of anterior gonopods not evenly subuncate at end; telopodite of



posterior gonopods with inner and outer pieces coalesced; coxal lobe of third legs largest ----- 3

3. Ventral margin of mandibular cheeks rounded. End of telopodite of posterior gonopods divided into several short irregular lobes.

----- *Floridobolus*, new genus

Ventral margin of mandibular cheeks broadly angular. End of telopodite of posterior gonopods acute, not divided into lobes -----

----- *Californibolus* Verhoeff 1944

#### **Floridobolus**, new genus

*Diagnosis*.—Distinguished especially by the rounded rather than V-shaped apex of the sternum of the anterior gonopods and by the presence of several short lobes on the end of the telopodite of the posterior gonopods. Modification of coxal lobes of anterior legs much as in *Californibolus* and related genera.

*Genotype*.—*Floridobolus penneri*, new species.

Surface of body shining, very finely punctated. No scobinae. Ocelli flat, in an irregular patch. Keels of collum acutely narrowed. Apex of caudal segment flattened, shorter than valves, which do not have the medial margins inflated and raised. Third legs of male with coxae produced ventrad in blunt, anteriorly directed, closed uncate processes.

Sternum of anterior gonopods without a ventral medial projection; coxal plates contiguous; telopodites broad, the apical region not uncate. Telopodite of posterior gonopods with inner piece coalesced with outer piece; one of the several short lobes on its apical region with prickles.

#### **Floridobolus penneri**, new species

Figures 1-3

*Type locality*.—Ten miles west of the Archbold Biological Station, U. S. Highway 70, Lake Placid, Highlands Co., Florida, 1 ♂, Aug. 8, 1956; 1 ♂, July 19, 1957; L. R. Penner.

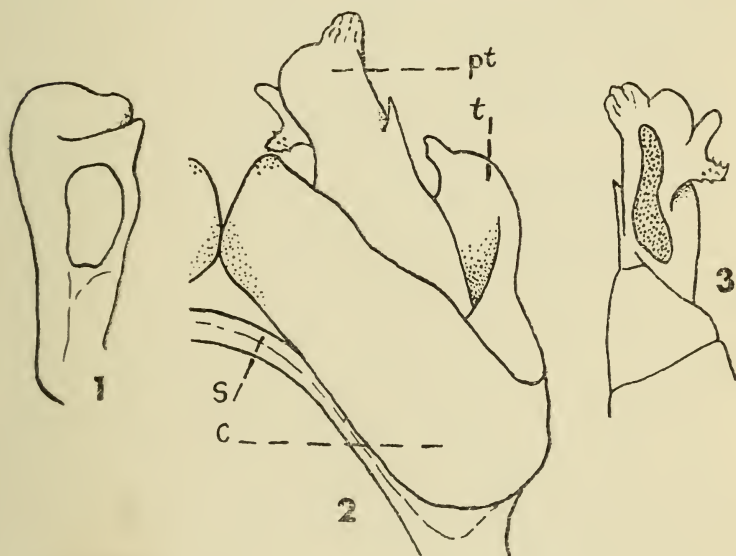
The holotype will be deposited in the American Museum of Natural History and the paratype will be retained in the author's collection.

*Description*.—Greatest body width 11.6 mm., length about 92 mm., body segments 49 and 50. In alcohol one specimen with black hindbelts, antennae, and legs and brown midbelts; other specimen similar but with greenish tinge. Setigerous labral foveolae 5 + 4 and 6 + 4. Ocelli black, about 65 in 9 curved rows. Ventral margin of mandibular cheeks rounded; mandibular cheeks with shallow antennal furrow. Keels of collum with a submarginal furrow that reaches from the ocelli to the posterior margin; anterior margin of collum slightly concave at level of mandibular cheeks; keels acutely narrowed. Keels of second segment broadly rounded. Segmental furrows continued faintly across dorsum, but not impressed. Hindbelts with minute serrae at ends of ventral striae. Pores in front of and almost touching segmental furrows. Caudal tergite with a slight horizontal depression; apex of tergite rounded, flattened, depressed; ratio of length of caudal tergite to anal valves, as viewed from above, less than 4/1. Anal scale with anterior margin nearly straight.

Coxal lobe of third legs reaches to about the middle of the second

segment of the legs, appearing triangular from a posterior view, but from a lateral view (Figure 1) it is seen to be an anteriorly directed, tightly closed, uncate lobe. Coxal lobe of fourth legs also appearing triangular from a posterior view, but less thickened than the third coxal lobe and not uncate. No other legs with coxal lobes. Second segment of legs with a small rounded protuberance on the distal end of the ventral surface, the protuberances becoming progressively smaller on posterior legs.

Right gonopods appear from an anterior view as shown in figure 2. Sternum of anterior gonopods narrow, the arms long, rounded at the apex, with the triangular area between the sternum and the coxal plates filled by a tough membrane. Telopodite of posterior gonopods (Figures 2, 3) almost straight, about as long as the coxal region, with one acute subterminal process and four short, blunt, terminal lobes, of which one bears prickles; cavity on its posterior surface enclosed by a membrane.



*Floridobolus penneri*, n. gen., n. sp. Fig. 1. Coxa of left third leg, lateral view. Fig. 2. Right gonopods, anterior view; c- coxal plate, s- sternum, t- telopodite of anterior gonopod; pt- telopodite of posterior gonopod. Fig. 3. Telopodite of right posterior gonopod, posterior view.